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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,130	09/07/2001	Toru Nakamura	213151US0PCT	7782

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EXAMINER
ZIMMER, MARC S

ART UNIT	PAPER NUMBER
1712	11

DATE MAILED: 03/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/926,130	NAKAMURA ET AL.	
	Examiner	Art Unit	
	Marc S. Zimmer	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 January 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *7-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14-20 and 22* is/are allowed.

6)☒ Claim(s) *7-13 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Based on the Examiner's indication of allowable subject matter in claim 2, Applicant has composed new claim 7, which incorporates all of the limitations of original claims 1 and 2. Likewise, a new claim containing all of the limitations of original claims 1 and 5 has been submitted. While these amendments are sufficient to overcome the art applied in paper no. 7, a new reference germane to the instant invention was unearthed upon re-searching the combination of a photoactivated, hydrosilylation-cured silicone and polyethylene terephthalate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman et al., U.S. Patent # 6,046,250.

New claim 7 takes the same form as original claim 1. That is, claim 7 is a product-by-process claim directed to a non-structural laminate comprising a PET layer and an addition-cured silicone layer. The latter is further described in terms of the conditions employed to cure said layer. In view of *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985), the patentability of a product-by-process claim is evaluated solely on the novelty of the product and the process by which the same is obtained is not accorded weight. ("Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product

itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process".) Consequently, the Examiner is required only to locate a reference teaching an equivalent product.

As was noted before, the Applicants have distinguished the instant invention from a casting film that is prepared from an addition-curable composition subjected to elevated temperatures. They have also demonstrated that a film of the instant invention has different properties than an epoxy-functionalized siloxane polymer cured by photo-activated means. However, there is nothing in the Specification distinguishing the product of claims 7-13 from a silicone-coated substrate wherein the silicone is addition (hydrosilylation) curable but is cured by radiative, instead of thermal, energy. Therefore, a reference teaching an article featuring a PET layer and an addition-curable silicone layer wherein silicone curing is promoted only by light energy will be considered applicable to the claims.

Boardman discloses a hydrosilylation-cured polysiloxane mixture and a polyethylene terephthalate film coated with the same (Example 5). The silicone layer is prepared by subjecting to actinic radiation a composition comprised preferably of (i) a dimethylpolysiloxane (column 8, line 21) bearing ethylenically-unsaturated hydrocarbon radicals e.g. vinyl, propenyl, and hexenyl groups (column 7, lines 20-51), (ii) an organohydrogenpolysiloxane (column 8, lines 29-67 through column 9, lines 1 to 37), (iii) a free radical photoinitiator/accelerator that absorbs light in the 200 to 800 nm range

such as those mentioned in the bottom half of column 4 and the top of column 5, (iv) a hydrosilylation catalyst-activating photosensitizer including those having an anthraquinone-, benzophenone- or thioxanthone skeleton (column 6, lines 1-3), and, of course, (v) a platinum catalyst. Photosensitizers are selected from those that will absorb in the same wavelength region as was designated for the accelerator (iii).

In Example 5, the silicone layer is first subjected to irradiation using a mercury lamp. Thereafter, it is heated in a circulating oven at 100° C for five minutes. This process contrasts from that which is claimed in that the curing treatments are performed in reverse order. However, it is unlikely that this would yield a different product. *In arguendo*, claims 1 and 21 do not stipulate that these steps are to be carried out in a specified order. Ultimately, the significant aspect that the silicone is cured, at least in part, by irradiation with ultraviolet light is satisfied.

A specific coating density for the silicone layer is not expressly disclosed. Rather, an amount of the silicone is disclosed in terms of layer thickness instead. Nonetheless, Applicant has not attached any criticality to this parameter. Moreover, one of ordinary skill is fully capable of determining as a matter of routine experimentation the amount of material to be applied to a substrate so as to minimize cost while, at the same time, ensuring that there is sufficient material coated onto the substrate so that it may fulfill its intended role. "Discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Allowable Subject Matter

Boardman does not suggest that the base silicone polymer may be comprised of two or more silicones having distinct substitution patterns where the unsaturated groups are concerned. Further, the Examiner could not ascertain what particular benefit might be derived from this modification of the invention disclosed by the reference. Accordingly, claims 14-20 and 22 are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 703-605-1176. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

March 11, 2003

Robert Dawson
Supervisory Patent Examiner
Technology Center 1700